

REMARKS/ARGUMENTS

The rejections presented in the Office Action dated August 10, 2010 (hereinafter Office Action) have been considered. Withdrawal of the restriction requirement is acknowledged with appreciation. Claims 25, 35, and 49-65 remain pending in the application. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

The undersigned wishes to thank Examiner Kahelin for the courtesy of a telephone interview which took place on September 27, 2010. During the interview, the undersigned presented the arguments made below. Examiner Kahelin suggested that in order to resolve the § 112 rejections, passive language in the rejected claims (e.g., “is indicated” in claim 49) be changed to active language, and the Examiner indicated that such amendments would be entered even though the amendments are submitted after final rejection. Applicant acknowledges with appreciation the Examiner’s willingness to enter the amendments.

The Office Action rejected claims 49-54 under 35 U.S.C. §112, second paragraph, as being indefinite. According to the Office Action, it is unclear which element or elements of base claim 25 are limited by the language of dependent claims 49-53. Claim 54, which refers to opening a correlation window “based on a cardiac cycle feature fiducial point”, is rejected as having set nothing forth to determine fiducial points. Applicant respectfully traverses.

Applicants are afforded a great deal of latitude in how they choose to define an invention, so long as the terms and phrases used define the invention with a reasonable degree of particularity and distinctness (*see, e.g.*, MPEP §§ 2173.02, 2173.05(e)). Some latitude in the manner of expression should be permitted even though the language is not as precise as the examiner might desire. *See* MPEP § 2173.02. When read in the context of base claim 25, the language of dependent claims 49-53 easily satisfy these standards.

Base claim 25 states that “the controller [is] configured to ... *discriminate* between *normal* cardiac function and cardiac *arrhythmia* ...” (emphasis added). Claims 49, 51, 52, and 53 all refer back to this quoted language, and therefore also refer back unambiguously

to the controller of claim 25, by stating “wherein discrimination between normal cardiac function and cardiac arrhythmia” comprises/is based on (some additional feature(s)). The additional feature(s) recited in those dependent claims would reasonably be understood as referring to the configuration of the controller because of its direct association with the discrimination function of the controller. The same can be said for dependent claim 50. Although claim 50 does not recite the word “discrimination”, it refers to the cardiac function being “determined to be *normal*” under some conditions and the cardiac function being “determined to be *arrhythmic*” under other conditions. Here, the words “normal” and “arrhythmic” clearly refer back to the configured controller of base claim 25. Claims 49-53 thus are seen to easily satisfy the requirements of 35 U.S.C. §112, second paragraph.

The rationale for rejecting claim 54 was that it “set[s] nothing forth to determine fiducial points”. Applicant again refers to the guidance provided in MPEP § 2173.02, which states that definiteness of claim language must be analyzed not in a vacuum, but in light of (A) the content of the particular application disclosure; (B) the teachings of the prior art; and (C) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. The person of ordinary skill would certainly understand what is meant by the term “fiducial point” in claim 54, and that is sufficient for compliance with the second paragraph of 35 U.S.C. §112. The Examiner’s question about how the fiducial point is determined is of no relevance to the question of definiteness. The scope of claim 54 is readily ascertainable by the person of ordinary skill regardless of how the “fiducial point” is determined. Claims are meant to define the scope of patent coverage, not to provide an instruction manual on how the invention is to be practiced. Claim 54 unambiguously defines the scope of patent coverage. Withdrawal of the rejection under 35 U.S.C. §112, second paragraph of claim 54, and of claims 49-53, is respectfully requested.

Withdrawal of the rejections under 35 U.S.C. §112, second paragraph are also requested in view of the clarifying amendments being made to claims 49, 50, and 51 to change passive voice to active voice.

The Office Action rejected claims 25, 35, 49, 51, 52, 57, 59, and 61 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,496,361 (Moberg et al.), hereinafter “Moberg”. Applicant respectfully traverses.

Independent claim **25** recites among other things a patient-external device that includes a user interface. Besides being configured for providing a visual output, the user interface is also “configured for providing ... an audio output representative of the audio signal”. The undersigned has carefully reviewed the Office Action, but cannot find any explanation of how or where Moberg teaches this claim feature. In the absence of any such explanation, no *prima facie* rejection of claim 25 has been made because the rejection fails to take into account all elements of the claim. Withdrawal of the rejection under 35 U.S.C. §103(a) of claim 25, and of its dependent claims 49, 51, 52, and 59, is respectfully requested.

During the telephone interview, the Examiner explained that the rejection of claim 25 also relied on the teachings of U.S. Patent 7,035,684 (Lee), which is referred to in numbered paragraph 13 of the Office Action as follows:

“13. The prior art made of record and not relied upon is considered pertinent to applicant’s disclosure. Lee is one of many teachings of internal and external memories, external displays, and recording ‘audio’ signals.”

During the teleconference, the Examiner pointed to the speaker 65 shown in Lee’s Figure 4 as teaching a user interface configured for providing an audio output. In response, the undersigned notes that the written record does not make this clear. The rejection of claim 25 is said to be Moberg, not a combination of Moberg and Lee. Although paragraph 7 of the Office Action states that certain things are “notorious in the art”, those things are not said to include a user interface configured both for providing a visual output representative of a cardiac electrical signal and for providing “an audio output” representative of the audio signal. Nor does paragraph 13 of the Office Action cite Lee as teaching such a user interface. If the rejection of claim 25 is maintained after the submission of this paper, Applicant respectfully requests at least that the finality of the previous Office Action be withdrawn.

Independent claim **35** recites among other things “correlating the heart sounds [from the audio signal] with the cardiac features of the cardiac electrical signal”. For this claim feature, the Office Action (see the bottom of page 3 thereof) points to the passage of Moberg that stretches from column 18, line 49 to column 19, line 17. The undersigned has carefully reviewed this passage and cannot find therein any discussion or hint of Moberg correlating heart sounds from the accelerometer signal with cardiac features of the electrical activity signal. Moberg’s discussion of control logic being configured to respond to signals from either the accelerometer signal analyzer or the electrical signal activity analyzer, or configured to respond primarily to either the accelerometer signal analyzer or the electrical signal activity analyzer and to use information provided by the analyzer not designated as the primary source of information as a secondary source of information, or that the analyzer selected as the secondary source of information could be used to confirm the presence of cardiac arrhythmias detected by the primary source of information, does not rise to the level of a teaching or hint of correlating heart sounds from the accelerometer signal with cardiac features of the electrical activity signal. In the absence of such teaching, no *prima facie* rejection of claim 35 has been made because the rejection fails to take into account all elements of the claim. Withdrawal of the rejection under 35 U.S.C. §103(a) of claim 35, and of its dependent claims 59 and 61, is respectfully requested.

During the teleconference, the Examiner again pointed to the paragraph bridging columns 18-19 of Moberg, where one analyzer is selected as a primary source of information and the other analyzer is selected as a secondary source of information to confirm the presence of cardiac arrhythmias. The Examiner also pointed to the waveforms shown in FIG. 1, and the paragraph bridging columns 17-18. The undersigned disagreed that those portions of Moberg taught the correlating procedure set forth in pending claim 35, or using such correlation as a basis for discriminating between normal cardiac function and cardiac arrhythmia, also as set forth in pending claim 35. Withdrawal of the rejection is respectfully requested.

The Office Action rejected claims 50, 53-55, 60, and 62-64 under 35 U.S.C. §103(a) as being unpatentable over Moberg in view of U.S. Patent 6,643,548 (Mai et al.),

hereinafter “Mai”. The Office Action also rejected claims 56, 58, and 65 under 35 U.S.C. §103(a) as being unpatentable over Moberg in view of U.S. Patent 7,035,684 (Lee).

In response, Applicant respectfully submits that these rejections cannot be sustained at least on the basis that these rejected claims depend directly or indirectly from one of base claims 25 or 35, and the additionally cited references Mai and Lee do not remedy the deficiencies of Moberg discussed above with respect to those base claims. Withdrawal of the rejections is respectfully requested.

To the extent the current response has not responded to any characterization in the Office Action of the asserted art or of the claimed subject matter, or to any application in the Office Action of the asserted art to any claimed subject matter, any such lack of response should not be interpreted as an acquiescence to such characterizations or applications. A detailed discussion of each of the Office Action’s characterizations, or any other assertions or statements beyond that provided above is unnecessary in view of the present response. The right to address in detail any such assertions or statements in the future is reserved.

Authorization is given to charge Deposit Account No. 50-3581 (GUID.609PA) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the Examiner is invited to contact the undersigned attorney to discuss any issues related to this case.

Respectfully submitted,

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